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September 1961

NATIONAL PHOTOGRAPHIC INTERPRETATION CENTER

ERRATUM FOR NPIC/R-3/61

Please make the following corrections in NPIC/R-3/61, IRBM/MRBM Launch Areas in the European USSR, July 1961:

1. Page 24. Coordinates of the dumbbell launch area, located 16 miles south of Stanislav, USSR, should read 48-40-00N 024-48-30E (correcting a 10-minute error in latitude).
2. Page 43. A similar correction in the location of this area should be made in the table.

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PHOTOGRAPHIC INTERPRETATION REPORT

**IRBM/MRBM LAUNCH AREAS
IN THE
EUROPEAN USSR**

NPIC/R-3/61
July 1961

NATIONAL PHOTOGRAPHIC INTERPRETATION CENTER

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PREFACE

25X1D This photographic interpretation report has^o been prepared by the Army, Navy, Air Force, and Central Intelligence Agency in answer to CIA and Air Force requirements for analysis of missile facilities identified in the USSR from photography of KEYHOLE [REDACTED]. The CIA requirements (DDI/R-17/61 and DDI/R-18/61) request an analysis of IRBM/MRBM launch areas and associated facilities. The Air Force requirements (AFIC-2 and AFIC-3, 1961) request an analysis of SSM launch and support facilities.

Since final scale computations for Mission [REDACTED] were not available, mensural data given in this report are preliminary approximations and should not be considered precise. Also affecting the accuracy of measurements is the great amount of halation around images of light-toned objects located in dark-toned wooded areas. All mile distances given are in nautical miles.

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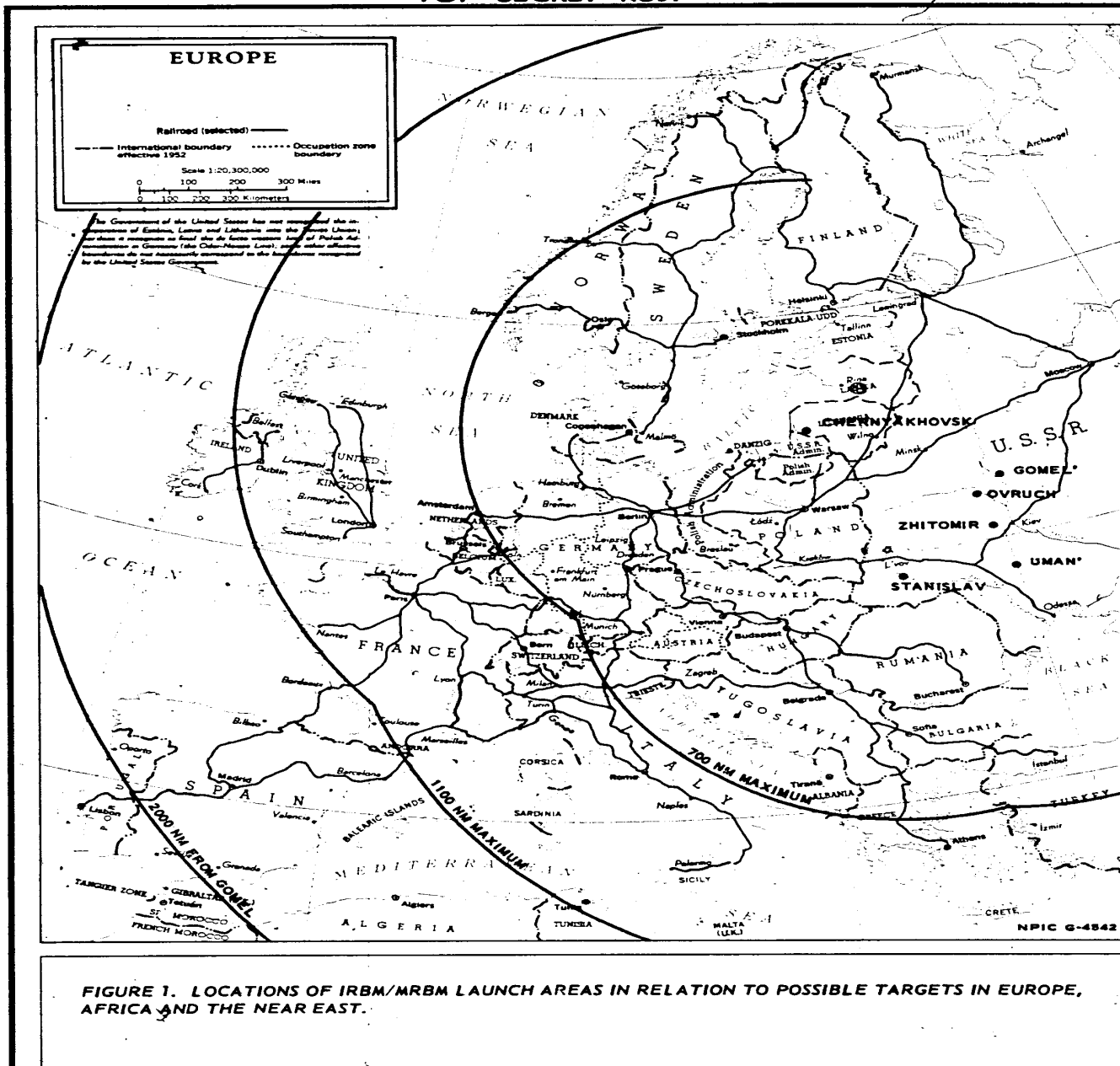


FIGURE 1. LOCATIONS OF IRBM/MRBM LAUNCH AREAS IN RELATION TO POSSIBLE TARGETS IN EUROPE, AFRICA AND THE NEAR EAST.

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SUMMARY

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Three patterns for Soviet IRBM/MRBM launch areas have been identified along the western perimeter of the USSR from photography of KEY-HOLE Mission [REDACTED]. A total of 25 launch areas (19 confirmed, 4 probable, and 2 possible) have been identified. All except one have four pads (a possible launch area near the Baltic Sea may have eight pads), for a total of 104 pads. The launch areas are deployed generally in pairs, with the two areas comprising each pair 3-5 miles apart. The locations of the launch areas extend from the Baltic Sea area southeast through the Belorussian and Ukrainian SSRs to within one hundred miles of the Black Sea. On the photography covering this whole area weather conditions ranging from scattered clouds to widespread overcast prevented examination of many areas made missile-suspect by collateral reports.

The launch areas identified are located in the general vicinity of the following cities: Chernyakhovsk (54-38N 021-47E) -- 4 confirmed, 2 probable, and 2 possible launch areas; Stanislav/Kamenets-Podol'skiy (48-55N 024-43E, 48-40N 026-34E) -- 5 confirmed and 2 probable launch areas; Ovruch (51-20N 028-48E) -- 6 confirmed launch areas; Uman' (48-44N 030-14E) -- 2 confirmed launch areas; and Gomel' (52-27N 030-58E) -- 2 confirmed launch areas. There is no evidence that these cities are specifically involved in IRBM/MRBM deployment or specifically associated with the launch areas. A tabulation of these launch areas is given on page 43.

All the launch areas are located in dense coniferous forests and are road-served only. Although each is near a rail line, the rail network in these areas is such that any facility constructed would have a rail line nearby. Although there are no readily evident security provisions for most of the launch areas, double fencing is likely, but is not discernible where the trees between fences have not been removed. At a number of launch areas, checkpoints are visible along the entrance roads.

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25X1D In regard to configuration, the launch areas fall into four groups, three of which have definite patterns. The three patterns identified are referred to as the "Inline," "Dumbbell," and "Rectangular" configurations.



25X1D [REDACTED] This type of area has a marked similarity to Launch Area 2C, Launch Complex C, Kapustin Yar/Vladimirovka Missile Test Center. 1/ All three configurations of launch areas are served by concrete roads and contain drive-through buildings and other support-type structures.

Those launch areas lacking a firm pattern have configurations which differ not only from the Inline, Dumbbell, and Rectangular types but also from one another.

Near some of the launch areas are a number of installations, situated in forest areas, which are possibly missile-associated. Also, a large probable missile-handling and support installation has been identified 17 miles southeast of Zhitomir. The facility has twelve large drive-through buildings and numerous other structures.

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INTRODUCTION

25X1D This report presents a detailed photographic analysis of what appear to be IRBM/MRBM launch areas* in the USSR identified from photography of [REDACTED]. The launch areas have been divided into five groups, based on location, and are referenced for convenience to the largest city in the vicinity. These cities are used only as reference points, and it is not implied that they are involved in IRBM/MRBM deployment or specifically associated with the launch areas identified.

A rescan of previous photography of these areas resulted in the identification of a number of the forests where the launch areas are now located. However, none of the earlier coverages show evidence of any activity in these forests. Figure 1 depicts the location of these IRBM/MRBM launch areas in relation to possible targets in Europe, Africa, and the Near East. Detailed descriptions of the launch areas and other possible missile-related installations follow, grouped for convenience under five headings indicating the area in which they fall. The probable regional support facility near Zhitomir is described separately, and a tabulation of data on all the launch areas is included last.

CHERNYAKHOVSK AREA

(Figure 2)

Four IRBM/MRBM launch areas with a total of 16 launch pads have been identified in the area around Chernyakhovsk, which is 40 miles southwest of Taurage, in the RSFSR. These four areas have the inline configuration. In the same general area are two probable and two possible launch areas with a total of 20 pads, a rail-served secure storage area which is possibly missile-related, and an area of possibly missile-related activity. In addition, four SA-2 SAM sites have been identified in the Chernyakhovsk area. Throughout this part of the RSFSR are a number

* These sites have been referred to in the body of the report as "IRBM/MRBM" launch areas.

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of good airfields. Most of the launch areas are grouped in pairs, with the pairs forming a triangle 15-20 miles on a side. The launch areas in a pair are 3-5 miles apart (see Figure 2).

Inline Launch Area (54-58-30N 021-28-50E)

(Figure 2, Item 1; and Figure 3)

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This launch area is 22 miles north-northwest of Chernyakhovsk and 12 miles southwest of Sovetsk, in a forest. It is one of the best examples of the Inline type found on the photography of [REDACTED]. The area, which is completed, has four launch pads placed in a northwest-southeast line, each served from the northeast by one of four parallel roads. Halation precludes identification of the exact shape of the pads, but generally they are either square or circular, the cleared area in the forest for each launch pad being 210 feet across. About 400 feet back from each launch pad is a drive-through building which measures 210 by 110 feet and is astride the road leading to the pad.

The main access road serving the launch area enters from the northeast and runs to the southwest side, thereby splitting the pads into two pairs, 680 feet apart. The pads in each pair are 535 feet apart and have a small building placed just forward of and midway between them. A possible drive-through building measuring 85 by 80 feet is located to the rear of the launch pads and south of the main access road. Three buildings 160 by 55 feet are on the north edge of the main access road leading to the pads.

A group of nine buildings which are probably for housing and support of personnel involved in operations at the area is situated at the north edge of the launch areas. A small cloud obscures the ground immediately west of these buildings, making it impossible to search for possible additional structures. No security provisions are evident at this launch area other than that afforded by its location in the forest.

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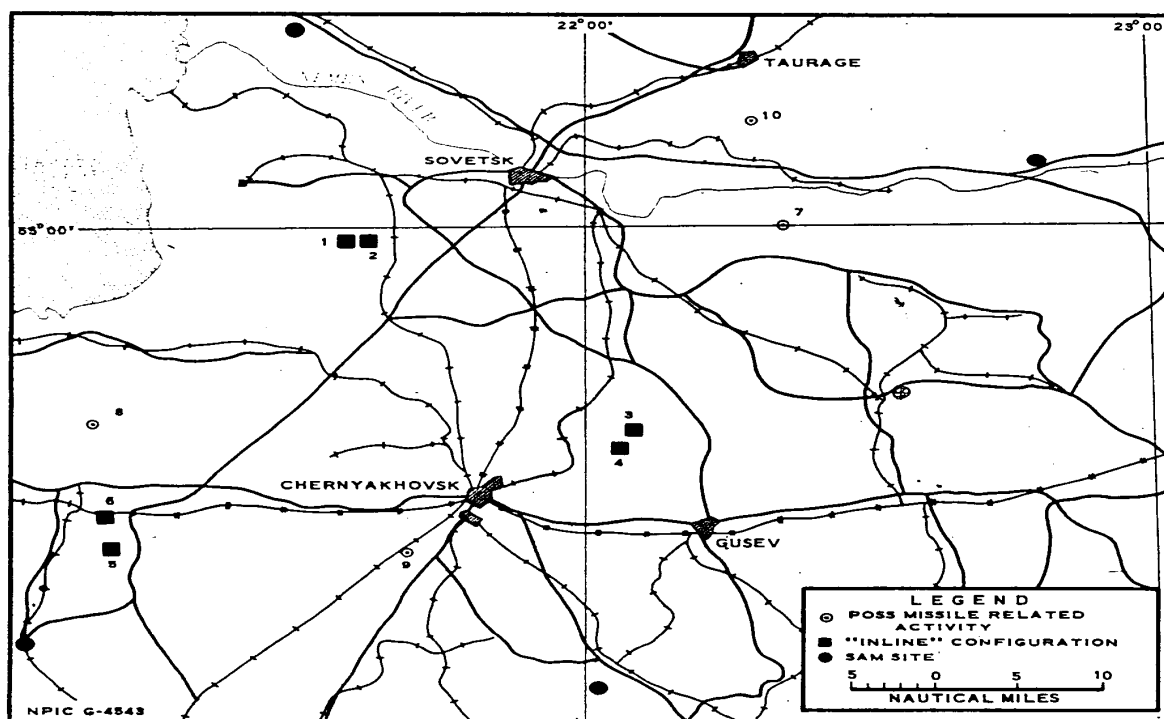


FIGURE 2. MISSILE ACTIVITY IN THE CHERNYAKHOVSK AREA.

Inline Launch Area (54-58-30N 021-36-30E)

(Figure 2, Item 2; and Figure 4)

This launch area, situated in a forest 5 miles west of item 1 and 24 miles north-northwest of Chernyakhovsk, is in deep cloud shadow. It appears to have a configuration almost identical with that of the launch area to the east, although not as much detail is discernible. The road layout and measurable features are the same as those de-

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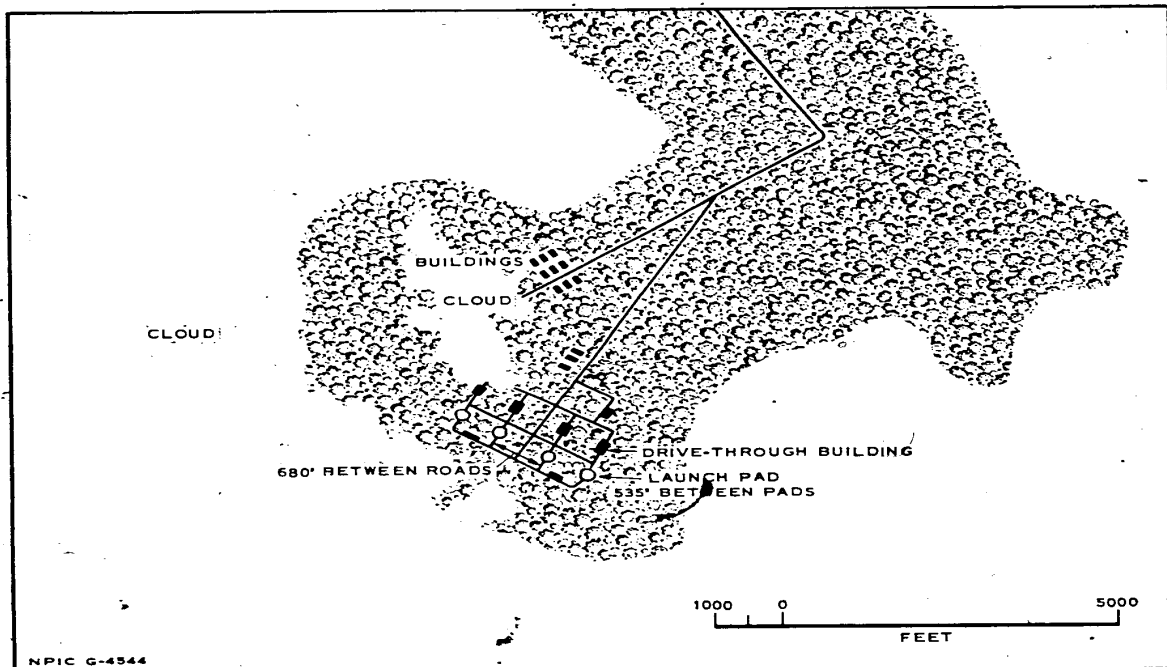


FIGURE 3. "INLINE" CONFIGURATION 22 NM NNW OF CHERNYAKHOVSK.

scribed above for item 1. The area appears completed. No fencing is apparent.

Inline Launch Area (54-43-30N 022-04-50E)
(Figure 2, Item 3; and Figure 5)

This launch area, 9 miles northeast of Chernyakhovsk, appears to be either completed or in a very late stage of construction. It is partially cloud covered and partially in cloud shadow, but enough of the configuration can be seen and measured to confirm it as an Inline-type launch area (see Figure 5).

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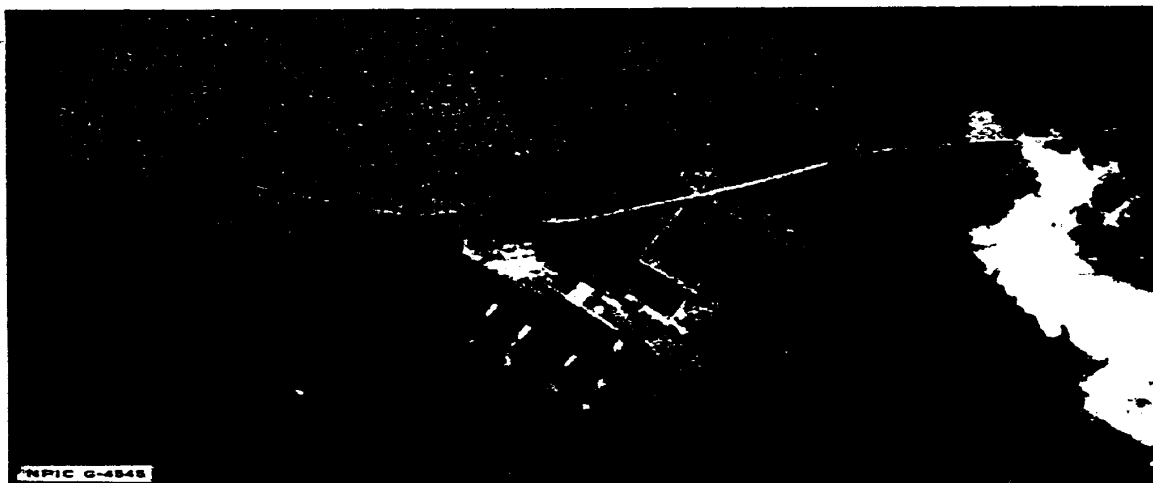


FIGURE 4. "INLINE" CONFIGURATION 24 NM NNW OF CHERNYAKHOVSK.



FIGURE 5. "INLINE" CONFIGURATION 9 NM NE OF CHERNYAKHOVSK.

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The four launch pads are in a generally north-south line, with one of four parallel roads serving each pad. Drive-through buildings at this area are not measurable on the photography, but their probable positions can be determined. Housing and support facilities are immediately north of the launch facilities and include ten buildings. No security precautions are apparent at this area.

Probable Launch Area (54-41-00N 022-04-50E)
(Figure 2, Item 4)

Three miles south of item 3 and 9 miles northeast of Chernyakhovsk is a probable Inline launch area, almost entirely obscured by clouds and cloud shadow. This identification is based mainly on the presence of housing and support facilities like those observed at confirmed launch areas. What roads are evident indicate a probable north-south arrangement of pads. The area is probably under construction.

Inline Launch Area (54-32-50N 021-12-00E)
(Figure 2, Item 5)

This launch area is 22 miles west-southwest of Chernyakhovsk in a heavily wooded area. The outline of the area is very faint, owing to heavy cloud shadow, but the configuration is unmistakably similar to previously described Inline launch areas. The positioning of buildings and the distance between roads are the same as at other areas of this type. The launch pads cannot be identified, but the pattern of parallel roads indicates that they are arranged in a northwest-southeast line. The possibility that the area is in the mid-stage of construction may partially account for the difficulty in interpreting this area.

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Probable Launch Area (54-35-40N 021-12-00E)

(Figure 2, Item 6)

Showing faintly at the edge of a cloud at the above coordinates are six housing and support buildings for a probable inline launch area, 21 miles west-southwest of Chernyakhovsk. These buildings are 2 miles north of the launch area, item 3. Although no pads or parallel roads can be seen, the positioning and the similarity of these six buildings to those at confirmed launch areas leads to the classification of this area as a probable launch area. Its construction stage is undetermined.

Possible Launch Area (55-00-50N 022-21-30E)

(Figure 2, Item 7; and Figure 6)

At the above coordinates, 29 miles northeast of Chernyakhovsk, is an area of undetermined configuration which may be a launch area with as many as eight launch pads. The area is almost entirely cloud covered; only clearings in the woods suitable for possible launch pads and a few buildings are visible. If constructed, the pads would not form a pattern like any at the confirmed IRBM/MRBM launch areas. Figure 6 depicts as much as can be determined about the layout of this possible launch area, whose construction stage is undetermined.

Possible Launch Area (54-45-05N 021-09-00E)

(Figure 2, Item 8; Figure 7; and Figure 8)

At the above coordinates, 25 miles west-northwest of Chernyakhovsk, is an area which has most of the characteristics of a launch area but which is dissimilar in configuration to any areas identified as missile launch areas. The area which appears completed, has a network of roads

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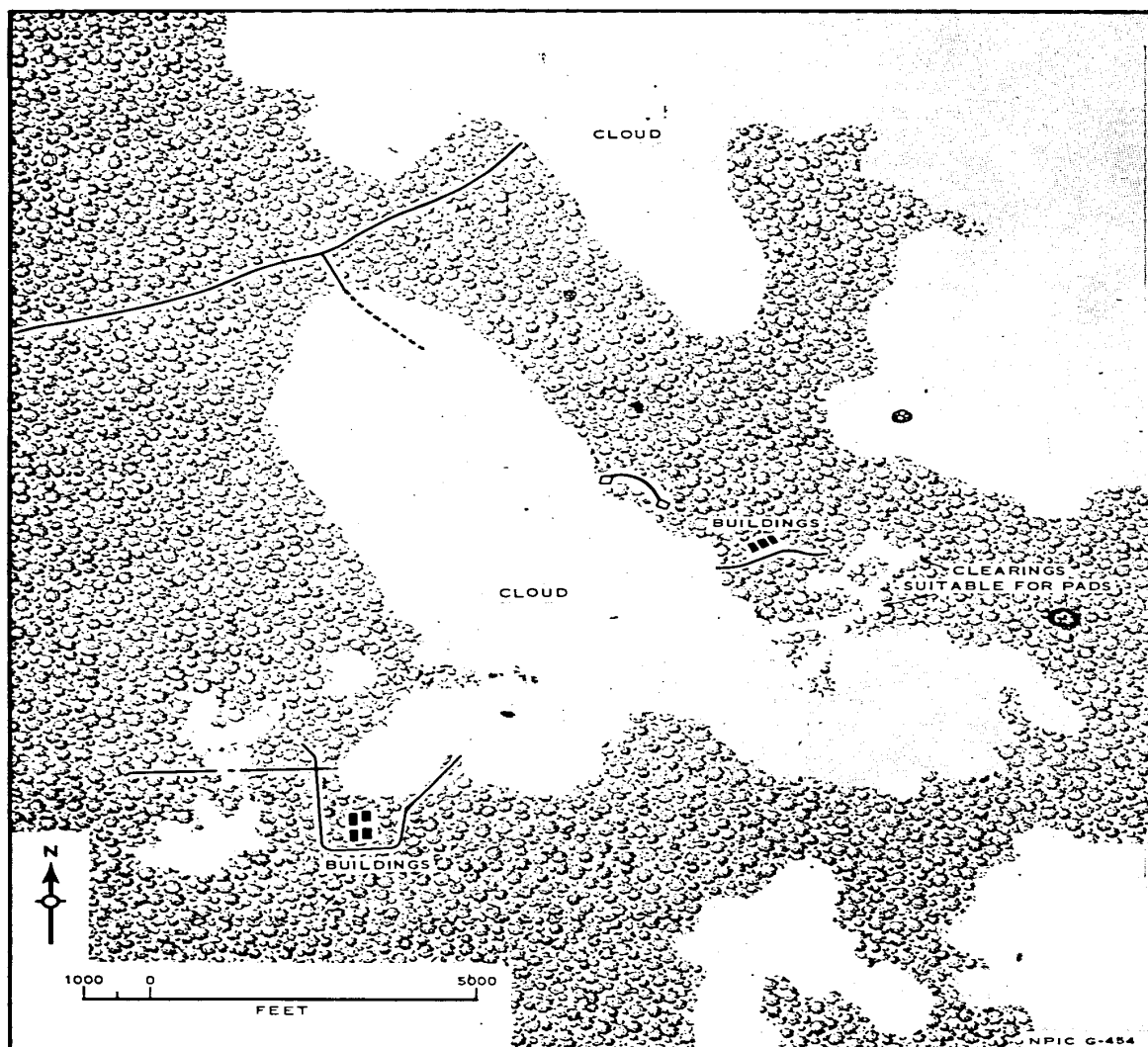


FIGURE 6. POSSIBLE LAUNCH AREA 29 NM NE OF CHERNYAKHOVSK.

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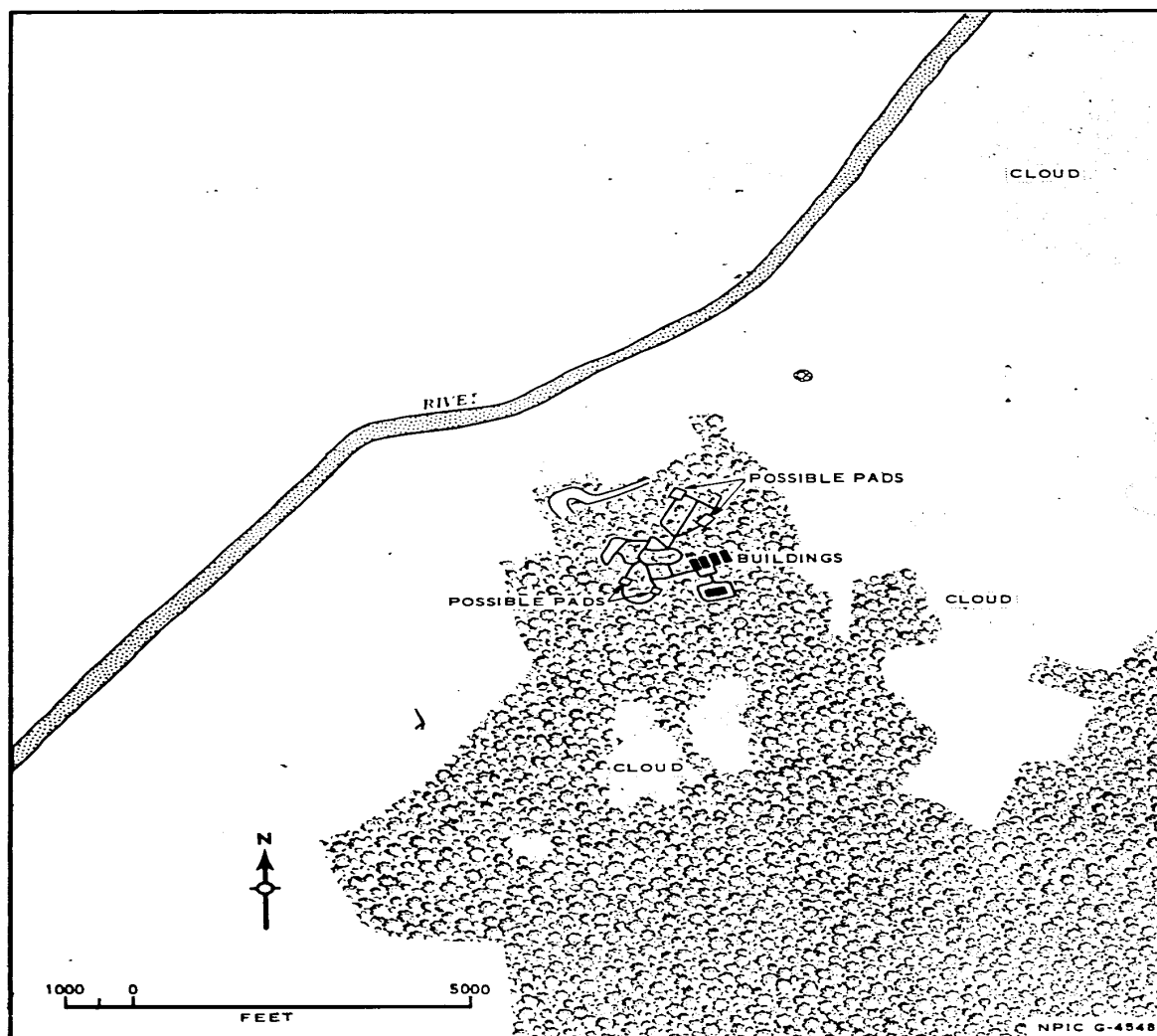


FIGURE 7. POSSIBLE LAUNCH AREA 25 NM WNW OF CHERNYAKHOVSK.

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FIGURE 8. PHOTO OF POSSIBLE LAUNCH AREA, ITEM 8.

with wide-radius turns, four possible launch pads, and a group of housing and support-type buildings.

The four possible launch pads are about 200 feet across. The support-type buildings appear to measure 200 by 65 feet. No security provisions can be discerned at this area; in fact, no access road into the forest where the installation is located can be identified.

Rail-Served Secure Storage Area (54-34N 021-42E)
(Figure 2, Item 9)

On the south side of the Chernyakhovsk-Olsztyn rail line and 6 miles southwest of Chernyakhovsk is a rail- and road-served secure storage area. The fenced part of the installation measures 1,500 by 750 feet. Although no buildings can be identified, some may be present, obscured by deep cloud shadow.

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Possibly Missile-Related Activity (55-10N 022-19E)
(Figure 2, Item 10)

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At one of these areas in the forest 5 miles south of Taurage the photography reveals a curved road, partially cloud covered, off which are two small clearings. Although not enough of the pattern is visible to ascertain the entire configuration, it may indicate the presence of a missile-related installation.

SAM Sites

The four SA-2 SAM sites identified in the Chernyakhovsk area are at the following locations.

- 55-17-21N 021-30-20E, 28.5 miles SSE of Klaipeda
- 55-05-30N 022-47-00E, 32.5 miles east of Sovetsk
- 54-22-00N 022-01-00E, 15 miles SE of Chernyakhovsk
- 54-25-30N 021-00-00E, 30 miles SE of Kaliningrad

STANISLAV/KAMENETS-PODOL'SKIY AREA

(Figure 9)

Five IRBM/MRBM launch areas and two probable launch areas, with a total of 28 pads, have been identified in the Stanislav/Kamenets-Podol'skiy area, Ukrainian SSR. Four launch areas have the Dumbbell configu-

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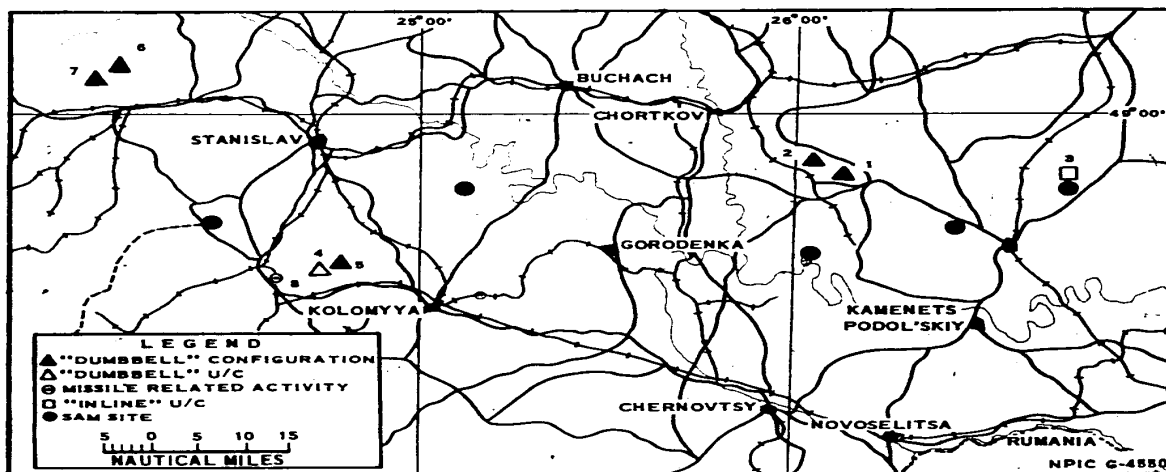


FIGURE 9. MISSILE ACTIVITY IN THE STANISLAV/KAMENETS-PODOL'SKIY AREA.

ration and one has the Inline configuration. The two probable launch areas differ in configuration from the Dumbbell and the Inline types and from each other. Also, a probably missile-related area and six SA-2 SAM sites have been identified in the Stanislav/Kamenets-Podol'skiy area.

Dumbbell Launch Area (48-51-30N 026-08-30E)

(Figure 9, Item 1; and Figure 10)

This launch area is 20.5 miles northwest of Kamenets-Podol'skiy and 2 miles south of the Chertkov/Kamenets-Podol'skiy highway, in the center of a stand of timber. This area, one of the best examples of the Dumbbell configuration, consists of four launch pads and adjacent support facilities. The launch pads are in parallel pairs. Each pair is approximately 300 feet apart and the pads in each pair are approximately 880 feet apart. Several buildings identified in the immediate area measure approximately 130 by 50 feet. The area appears to be complete.

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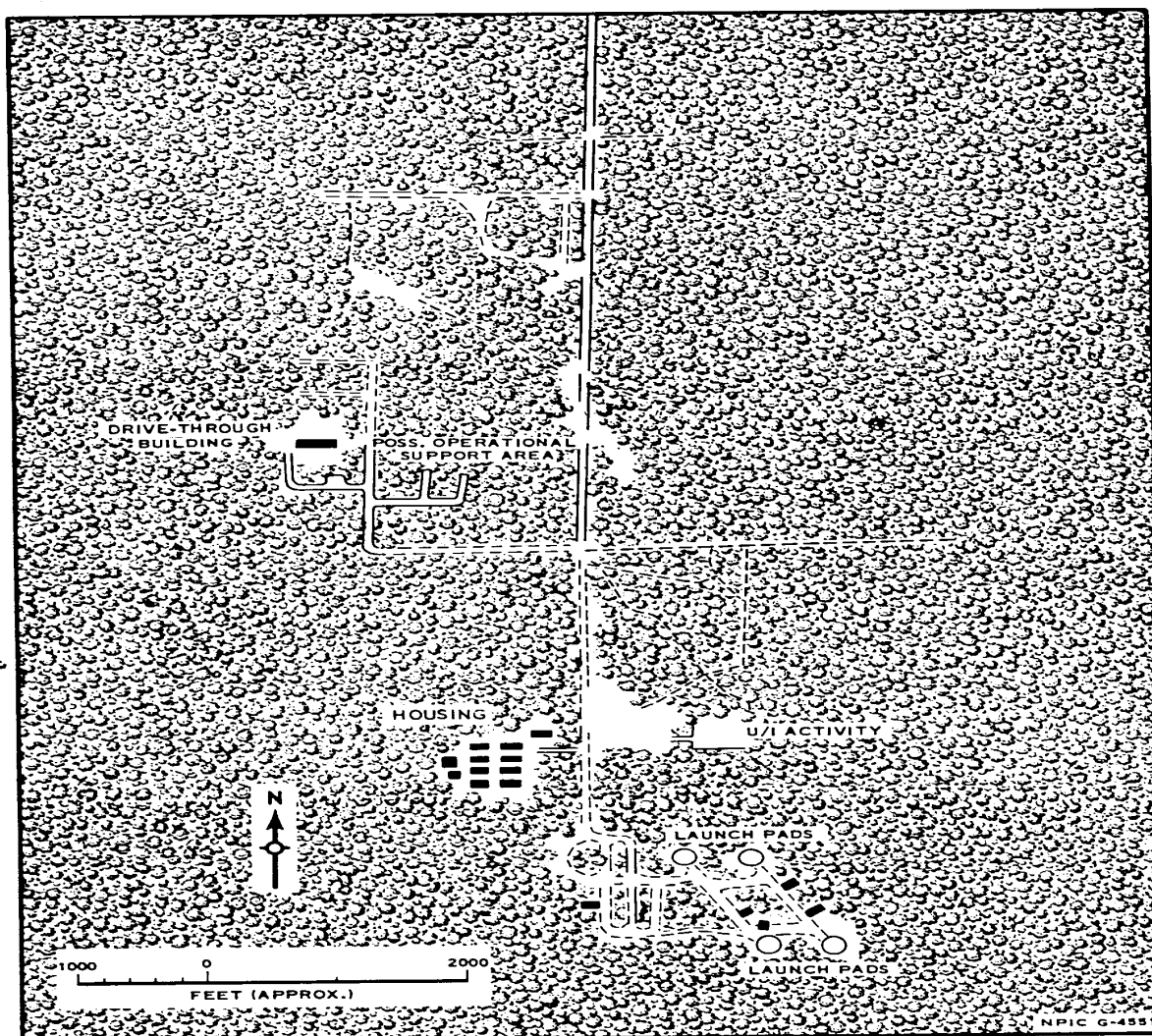


FIGURE 10. "DUMBBELL" CONFIGURATION 20.5 NM NW OF KAMENETS-PODOL'SKIY.

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Adjacent to the launch area is a small housing and support area containing at least seven 130- by 50-foot buildings. To the north of the launch area and in the same stand of timber is a possible operational support area, with one and possibly two possible drive-through buildings.

Dumbbell Launch Area (48-53-00N 026-03-30E)

(Figure 9, Item 2; and Figure 11)

This launch area is 24 miles northwest of Kamenets-Podol'skiy and 3.5 miles northwest of the launch area, item 1, and in the middle of a stand of timber. This area, which is paired with and similar to item 1, appears complete, is of the Dumbbell configuration, and has four launch pads. The pads are in pairs, but the pairs are not parallel. The corresponding pads in each pair are separated by 300 and 510 feet, respectively; the two pads in each pair are about the same distance apart (800 feet).

Between the two pairs of pads are two parallel roads. Spaced at equal distances between the parallel roads are four service roads, three of which are perpendicular to the parallel roads. A cleared area at the midpoint of the four service roads will probably contain four drive-through buildings.

Adjacent to the launch area on the north is a small housing and support area containing eight 150- by 50-foot buildings. Situated generally around the launch area are small sites of unidentified activity.

Inline Launch Area (48-51-10N 026-43-00E)

(Figure 9, Item 3; and Figure 12)

This launch area is 12 miles northeast of Kamenets-Podol'skiy, in a stand of timber. It has an Inline configuration and contains four launch pads under construction. In the immediate launch area are two drive-

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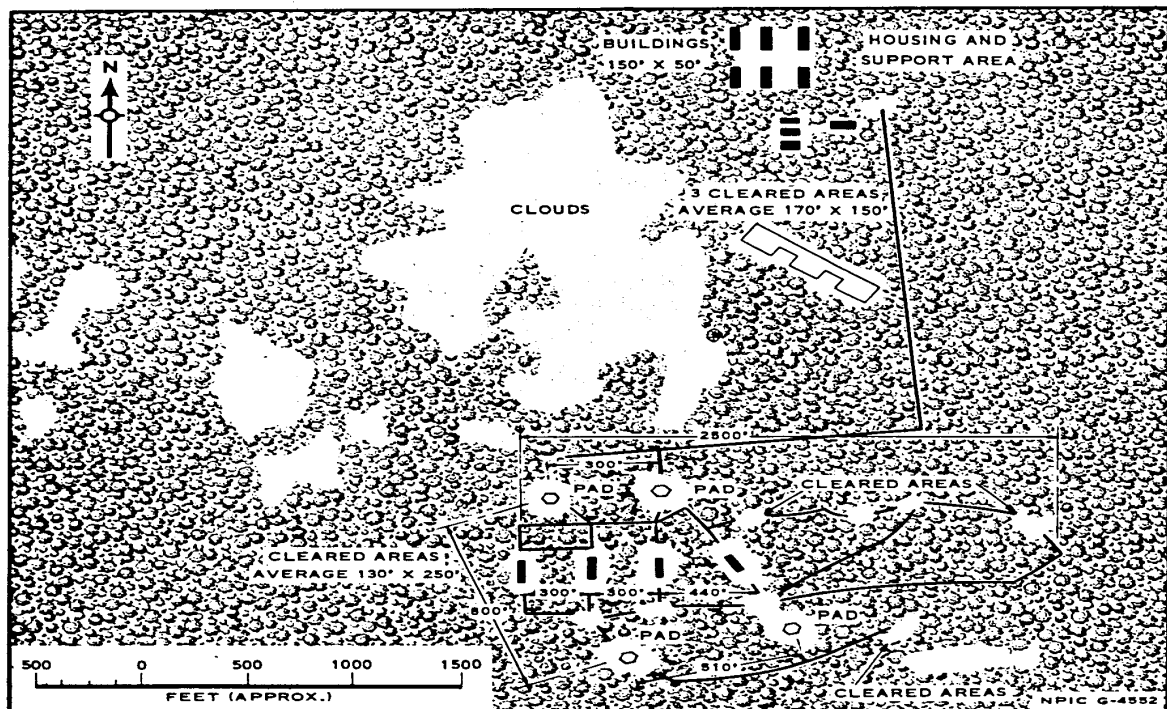


FIGURE 11. "DUMBELL" CONFIGURATION 24 NM NW OF KAMENETS-PODOL'SKIY.

through buildings and at least seven additional buildings. Adjacent, on the northwest, is a housing and support area containing at least 20 buildings.

Dumbbell Launch Area (48-38-45N 024-43-30E)
(Figure 9, Item 4; and Figure 13)

This launch area, 18 miles south of Stanislav and 6.5 miles north-northeast of Delyatin, is situated in a stand of timber. The area is of the

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Dumbbell configuration and contains four launch pads, one of which is under construction. Five probable buildings are in the immediate launch area, but their dimensions cannot be determined.

Approximately 1.5 miles south-southeast of the launch area is an operational support area with a road pattern indicating the presence of four drive-through buildings and at least seven other buildings. No measurements are possible.

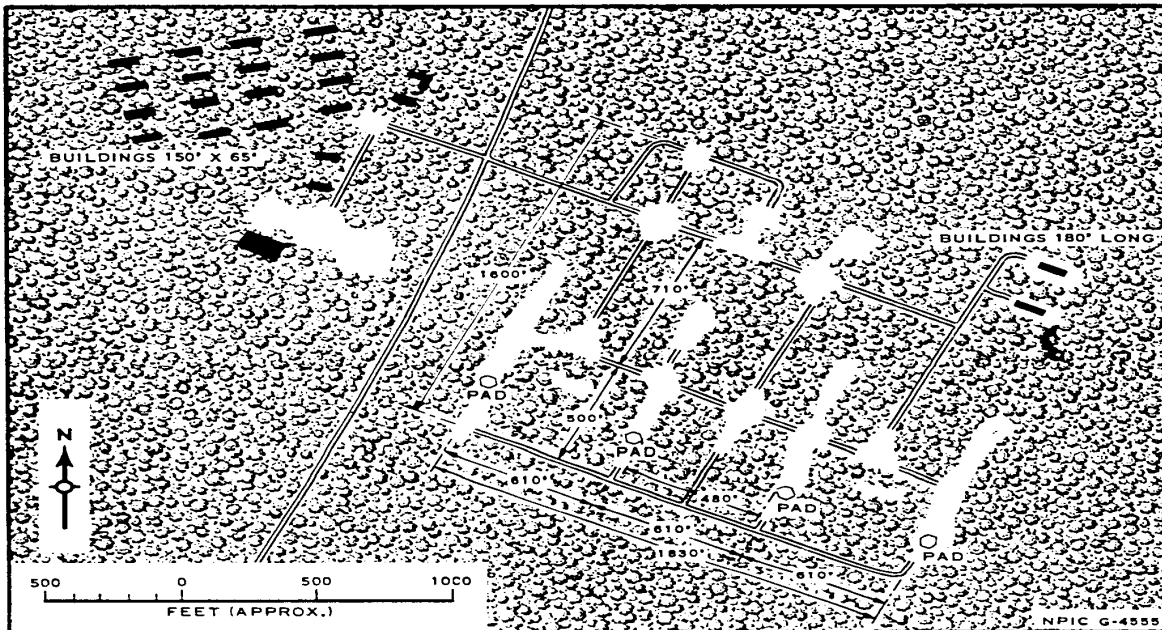


FIGURE 12. "INLINE" CONFIGURATION U/C 12 NM NE OF KAMENETS-PODOL'SKIY.

Dumbbell Launch Area (48-50-00N 024-48-30E)
(Figure 9, Item 5; and Figure 14)

This launch area is 16 miles south of Stanislav and 11 miles northeast of Delyatin, in a stand of timber. It has a Dumbbell configuration and con-

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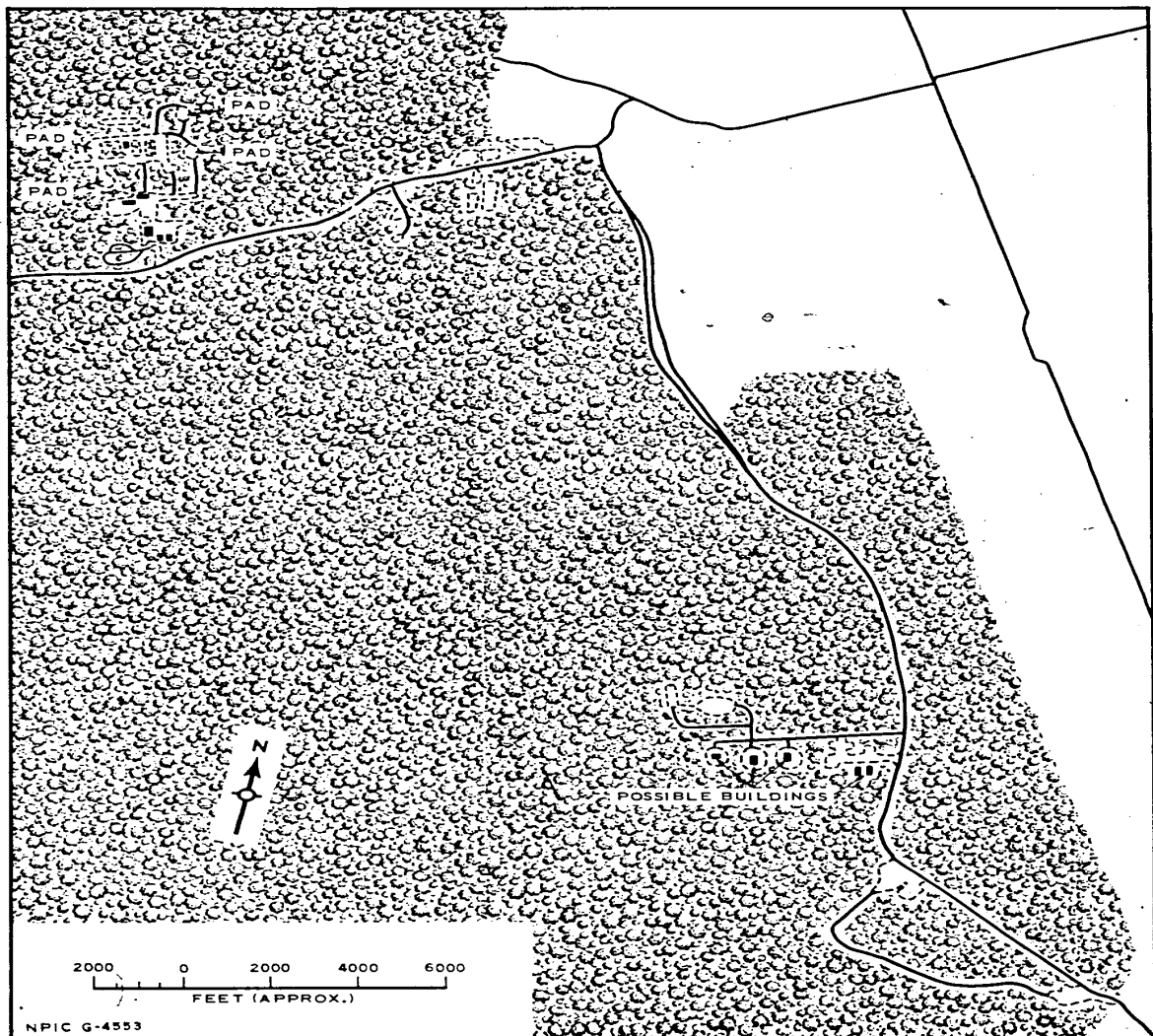


FIGURE 13. "DUMBELL" CONFIGURATION U/C 18 NM SOUTH OF STANISLAV.

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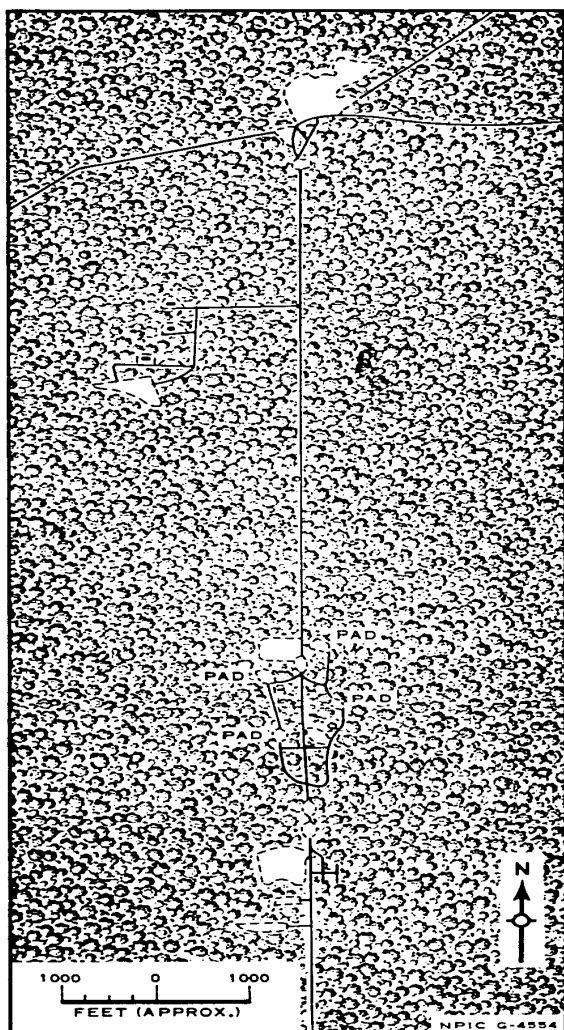


FIGURE 14. "DUMBBELL" CONFIGURATION 16 NM SOUTH OF STANISLAV.

tains four launch pads. Six probable buildings are within the launch area, but cannot be measured. The area appears completed.

Adjacent to the launch area on the south is a small housing and support area containing at least seven buildings. North of the launch area is an operational support area with a road pattern indicating the presence of four drive-through buildings and at least six other buildings. This operational support area and that of item 3 appear to be similar in some features to the Missile-Handling and Storage Area at Launch Complex G, Kapustin Yar. 4/

Probable Launch Area

(49-06-00N 024-08-00E)

(Figure 9, Item 6; and Figure 15)

This probable launch area is 26 miles northwest of Stanislav and 9 miles north-northeast of Dolina, in a large forested area. The area, which appears completed, has a modified Dumbbell configuration, with four pads. Although the area is obscured by haze and no buildings are discernible, the road pattern

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indicates the existence of one or two drive-through and other buildings.

A housing and support area is adjacent to the launch area on the south. At least five buildings are partially visible through the haze. West and northwest of the launch area are sites of unidentified activity, but no buildings can be identified.



FIGURE 15. PROBABLE LAUNCH AREA 26 NM NORTHWEST OF STANISLAV.

Probable Launch Area (49-04-00N 024-04-30E)
(Figure 9, Item 7; and Figure 16)

This probable launch area, 27 miles northwest of Stanislav, 5.5 miles north-northwest of Dolina, and 3.5 miles southwest of item 6, is situated in the same forested area as item 6. The area, which is completed, has some appearances of a modified Dumbbell configuration. Four pads, a drive-through building, and other possible buildings are visible. Haze partially obscures the area.

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A housing and support area is one mile southeast of the probable launch area. Although cleared areas for buildings can be identified, haze hampers interpretation.



FIGURE 16. PROBABLE LAUNCH AREA 27 NM NORTHWEST OF STANISLAV.

Probably Missile-Related Area (48-35-30N 024-36-30E)

(Figure 9, Item 8)

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An area of activity is visible 3.5 miles north of Delyatin, 3.5 miles south of Nadvornaya, 0.5 mile east of the Delyatin-Nadvornaya highway, and 21 miles south-southeast of Stanislav. Presence of roads with wide-radius turns, of building sites separated from one another, and of a possible site for a drive-through building suggests that this area is probably missile-related.

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SAM Sites

The locations of the six SA-2 SAM sites identified in the Stanislav/Kamenets-Podol'skiy area are as follows.

48-43-20N 024-26-00E, 18 nm SW of Stanislav
48-49-00N 025-06-50E, 18 nm SE of Stanislav
48-44-50N 026-25-30E, 7.5 nm NW of Kamenets-Podol'skiy
48-39-00N 026-01-00E, 22 nm west of Kamenets-Podol'skiy
48-50-50N 026-44-00E, 12 nm NW of Kamenets-Podol'skiy
49-05-00N 023-50-00E, 10 nm NW of Dolina

OVRUCH AREA

(Figure 17)

Within 35 miles of Ovruch and within 80 miles of Kiev in the Ukrainian SSR, are six IRBM/MRBM launch areas with a total of 24 pads. Five of these areas are of the Rectangular configuration, and one appears to be an Inline type. Two of the launch areas are secured by a fence, as indicated by a cut line in the forest. These are the only fence lines identified thus far at IRBM/MRBM launch areas. A possibly missile-related rail-to-road transfer area has been identified in the vicinity of two of the launch areas. Two SA-2 SAM sites have been identified in the Ovruch area.

Rectangular Launch Area (51-08-50N 028-00-30E)

(Figure 17, Item 1; Figure 18; and Figure 19)

This launch area, 33 miles west-southwest of Ovruch, is the best example of the Rectangular-type identified on the photography. The launch pads form a rectangle measuring 900 by 535 feet and are interconnected by a series of roads. The pads are 200 feet across. Examination of two of the pads which make one of the long sides of the rec-

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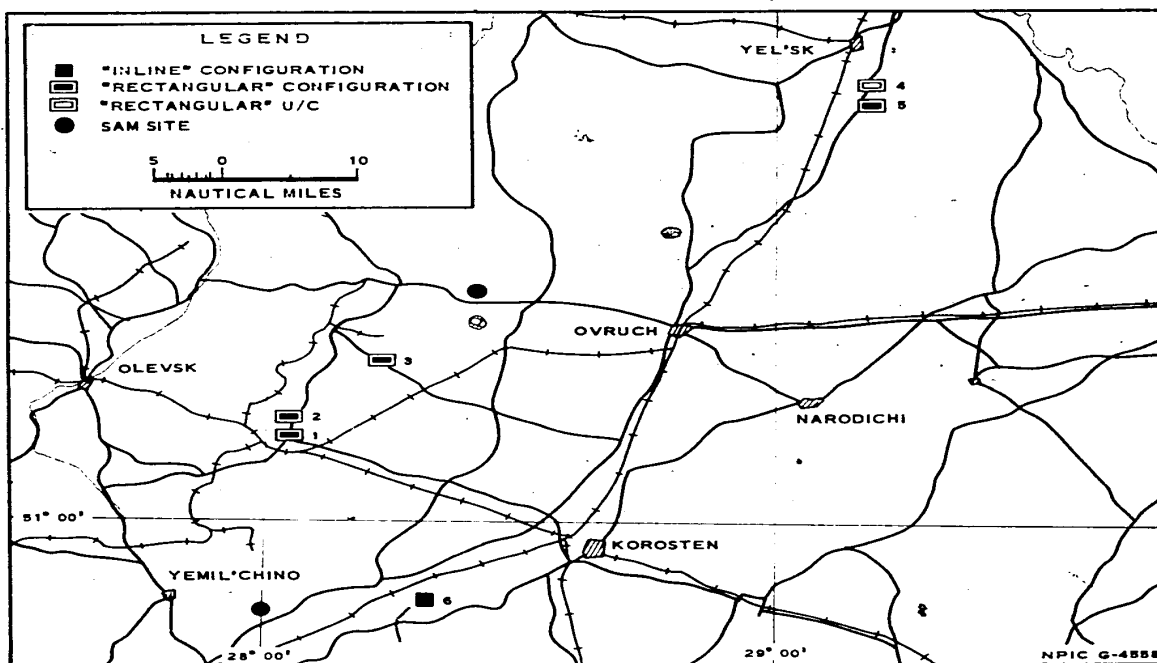


FIGURE 17. MISSILE ACTIVITY IN THE OVRUCH AREA.

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The area appears completed.

The road pattern and clearings in the woods immediately behind the launch pads indicate the probable presence of drive-through buildings, although they cannot be distinguished. About 2,000 feet east of the pads

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are at least 11 buildings which probably serve as housing and support for personnel. One mile southeast of the pads is a large military barracks area which has been reported to have been heavily damaged in 1944. However, this area appears to have been rebuilt and may or may not be associated with the nearby launch areas.

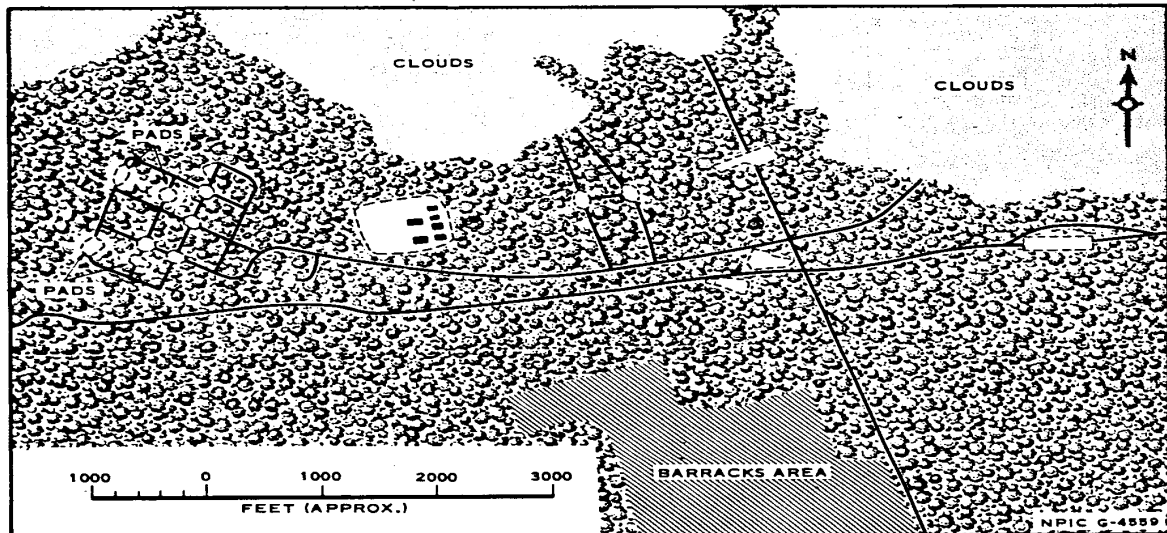


FIGURE 18. "RECTANGULAR" CONFIGURATION 33 NM WSW OF OVRUCH. Barracks area existed in 1944.

Rectangular Launch Area (51-10-00N 028-03-00E)
(Figure 17, Item 2; and Figure 20)

This launch area, 30 miles west-southwest of Ovruch and 3 miles north of the launch area, item 1, appears almost identical in configuration and size with item 1, although the placement of the housing and support buildings is slightly different. The area is completed.

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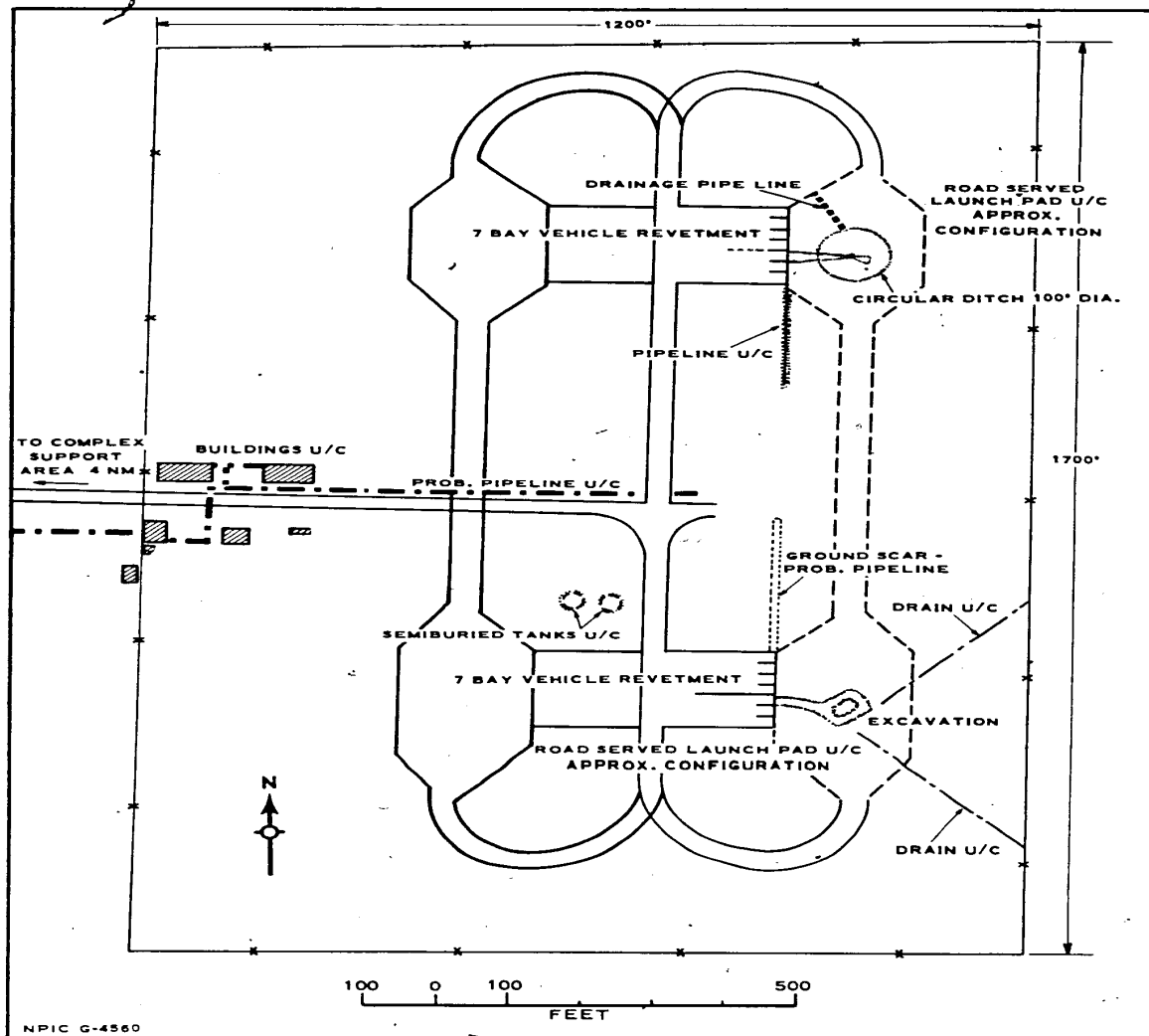


FIGURE 19. LAUNCH AREA 2C, KAPUSTIN YAR. This launch area, if enlarged by the addition of a mirror image as shown in red, would closely resemble the launch areas having a "rectangular" configuration.

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FIGURE 20. "RECTANGULAR" CONFIGURATION 30 NM WSW OF OVRUCH.

Rectangular Launch Area (51-16-50N 028-15-00E)
(Figure 17, Item 3)

This launch area, 20 miles west of Ovruch, is partially cloud covered. Measurements made at this area indicate that the pads are almost identical in size and configuration with those at the Rectangular launch areas described above. The area appears completed.

Rectangular Launch Area (51-43-55N 029-12-30E)
(Figure 17, Item 4; and Figure 21)

This area, 29 miles northeast of Ovruch, is a Rectangular launch area under construction. Evident is a cut line in the forest for a generally rectangular fence. Launch-pad measurements and layout are the same, as for the other Rectangular areas discussed in this section.

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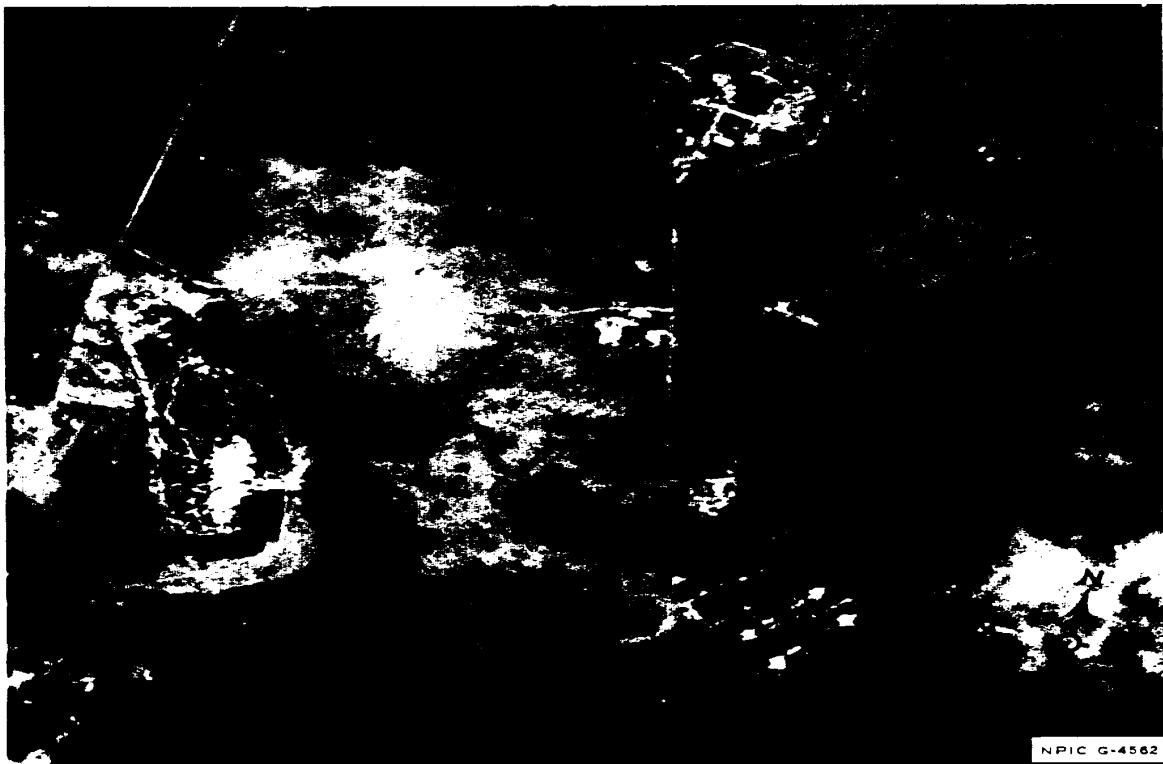


FIGURE 21. "RECTANGULAR" CONFIGURATION 29 NM NORTHEAST OF OVRUCH.

Rectangular Launch Area (51-42-00N 029-12-50E)
(Figure 17, Item 5)

Located 27 miles northeast of Ovruch and 2 miles south of item 4 is a Rectangular launch area either complete or in a late stage of construction. A portion of a fence line which appears to be rectangular is visible. The configuration of this facility is like that of the other

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Rectangular launch areas. The launch areas labeled items 4 and 5 are both served by the same road, which leaves the main Ovruch-Mozyr highway and runs east into the forest to a point midway between the launch areas, where it joins with a north-south road connecting the launch areas. Seven miles south-southwest of the point where the service road leaves the highway is a possibly missile-related rail-to-road transfer area. This area is at Stantsiya Slovechno between the highway and the rail line, at 51-35-30N 029-30-00E. The apparent rail transfer point is served by wide-radius-turn roads.

Inline Launch Area (50-52-10N 028-18-30E)

(Figure 17, Item 6; and Figure 22)

This launch area, 34 miles south-southwest of Ovruch, has an Inline configuration modified slightly because of its location along the Uzh River. The area is either complete or in a late stage of construction. The layout of the parallel roads indicates that the launch pads are in a northwest-southeast line, with two of the pads offset from the other two because of a curve in the river at this point. A group of

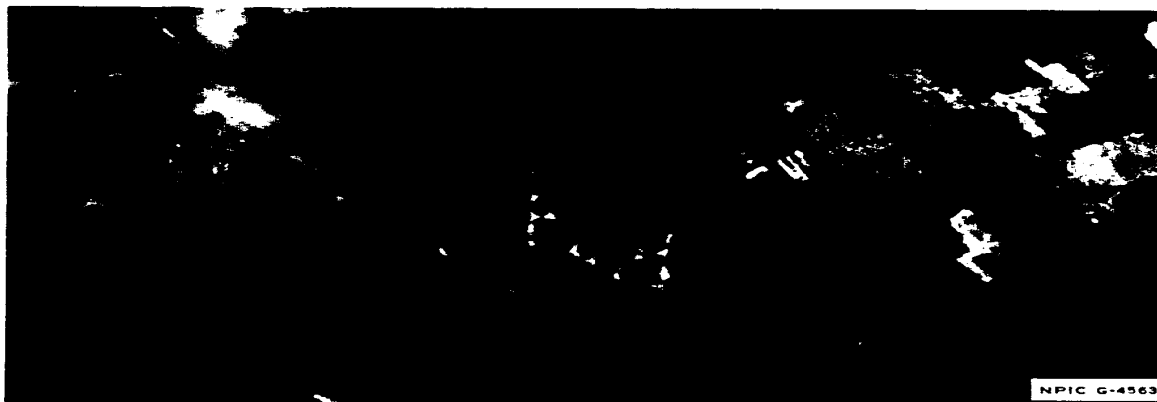


FIGURE 22. "INLINE" CONFIGURATION 34 NM SSW OF OVRUCH.

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housing and support-type buildings is just to the east of the launch pads. Measurements are generally the same as for other Inline launch areas described in this report.

SAM Sites

The three SA-2 SAM sites identified in the Ovruch area are located as follows: 51-24N 028-24E, 16 miles west-northwest of Ovruch; and 52-12N 028-57E, 14 miles west-northwest of Kalinkovichi; and 50-52N 28-00E, 25 nm west-southwest of Korosten.

GOMEL' AREA (Figure 23 and 24)

In the Belorussian SSR, near Gomel', are two Inline IRBM/MRBM launch areas, both under construction, with a total of eight pads (see Figure 23). No SA-2 SAM sites have been identified in this area. An excellent airfield is located just south of Gomel'. The rail line from Rechitsa to Gomel' and the Rechitsa-Gomel' highway pass between the two launch areas.

One launch area (Figure 23, item 1) is approximately 3 miles north of the rail line and 10 miles west of Gomel', at 52-54-45N 030-39-45E (see Figure 24). The second launch area (Figure 23, item 2) is approximately 10 miles southwest of Gomel' and 4 miles south of the Rechitsa-Gomel' rail line, at 52-18-45N 030-42-15E. Both launch areas have clearings for four pads. The general layout and distances between pads will be approximately the same as at the Inline launch areas in the Chernyakhovsk area. Each launch area has a housing and support area which appears complete and which is served by an access road connecting with the Rechitsa-Gomel' highway.

A double-fenced storage area is situated between the Rechitsa-Gomel' highway and rail line, at 52-24-00N 030-48-00E. However, no direct relation between this area and the two launch areas has been determined.

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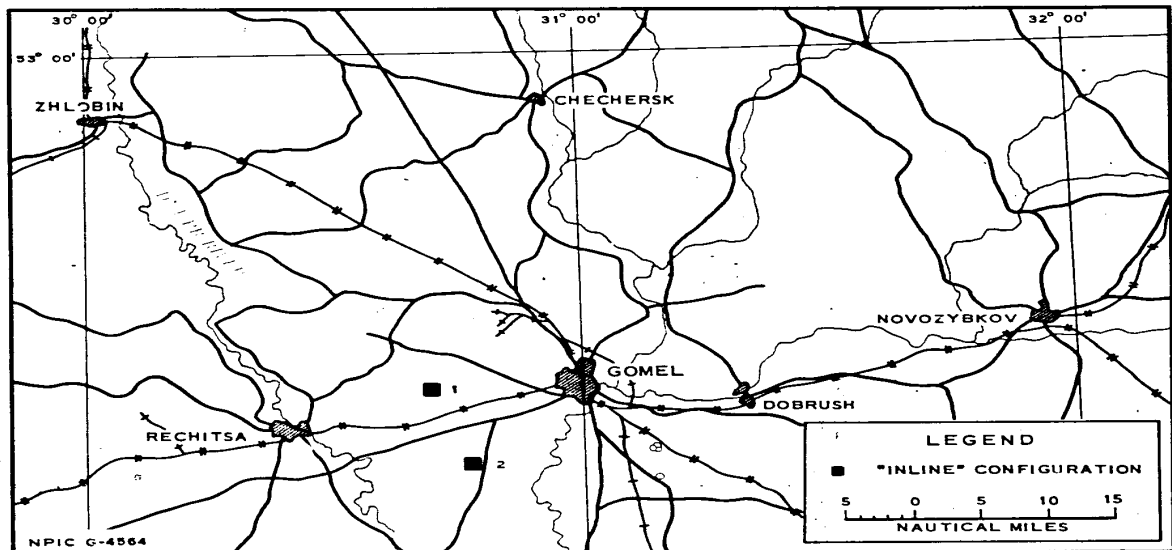


FIGURE 23. MISSILE ACTIVITY IN THE GOMEL* AREA.



FIGURE 24. "INLINE" CONFIGURATION 10 NM WEST OF GOMEL.

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UMAN' AREA
(Figure 25)

Two IRBM/MRBM launch areas (with a total of eight pads), a possible operational support area under construction, and a possibly missile-related area have been identified in the vicinity of Uman', in the Ukrainian SSR. One of the launch areas has a Dumbbell and the other an Inline configuration.

Dumbbell Launch Area (48-53-40N 030-27-45E)
(Figure 25, Item 1; and Figure 26)

This launch area is under construction 13.5 miles northeast of Uman' in a small forested area. It is similar in size and configuration to the offset Dumbbell at the launch area, item 2, in the Stanislav/Kamenets-Podol'skiy area. The four launch pads are arranged in two pairs; a portion of the connecting road between each pair of pads has been widened, probably to accommodate a drive-through building. No support facilities have been identified, but an area of unidentified activity south-southwest of the launch area may be a support area under construction.

Inline Launch Area (48-02-30N 029-33-30E)
(Figure 25, Item 2)

This launch area, 49 miles southeast of Uman' has the typical configuration and size of an Inline launch area, with four launch pads (see the launch area, item 1, in the section on the Chernyakhovsk area). The area appears completed. Road patterns for drive-through buildings and a pattern for a housing and support area to the northeast are visible. Ground haze makes interpretation difficult.

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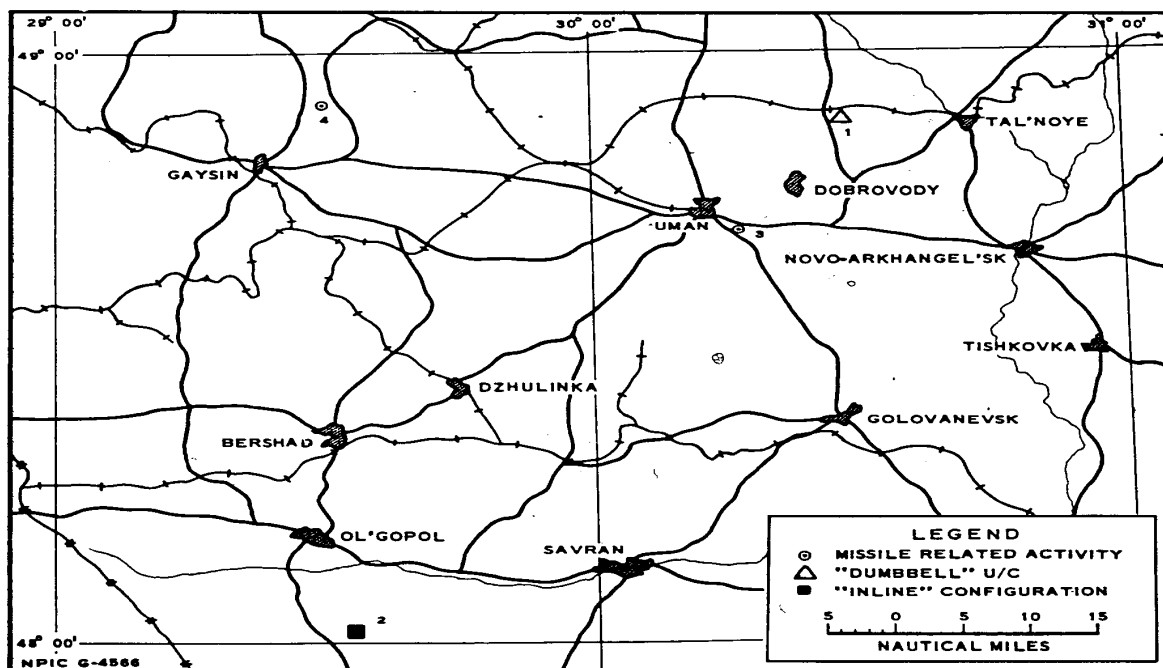


FIGURE 25. MISSILE ACTIVITY IN THE UMAN' AREA.

Possible Operational Support Area (48-43N 030-15E)

(Figure 25, Item 3)

This area, under construction, is 2.5 miles southeast of Uman' in a stand of timber. It resembles the Missile Handling and Storage Area at Launch Complex G, Kapustin Yar. 4/ Haze obscures the area.

1850 Possibly Missile-Related Area (48-56-20N 029-30-15E)

(Figure 25, Item 4)

This area is under construction 30 miles northwest of Uman' in a stand of timber. The road pattern, security from observation, and

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general appearance of the area tend to support the hypothesis that it is a possibly missile-related area. Southeast of the area is a small possible housing and support area.



FIGURE 26. "DUMBBELL" CONFIGURATION 13.5 NM NORTHEAST OF UMAN.

PROBABLE MISSILE-HANDLING AND SUPPORT INSTALLATION
(Figure 27)

A probable missile-handling and support installation is located at 50-09N 029-07E, 17 miles southeast of Zhitomir and 9.5 miles south of Korostyshev. It is situated in a forested area and is rail and road served. The installation has three main areas: a secured drive-through building area, a secured area with possible drive-through buildings, and an unidentified area.

The secured drive-through building area is approximately in the center of the installation and contains two rows of drive-through buildings: a unit of five buildings, and a unit of six slightly larger buildings. A single drive-through building is situated on the western edge and

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FIGURE 27. PROBABLE MISSILE HANDLING AND SUPPORT INSTALLATION 17 NM SE OF ZHITOMIR.

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between the two rows. These 12 buildings and two small sites of unidentified activity are inside the fenced portion, which is the only part of the whole installation that is rail served. In the western part of the area, outside the fence, is a transloading facility. At least five other buildings are dispersed throughout the area.

The second secured area is just north of the secured drive-through building area. It is smaller and contains a loop road forming a rectangle, with clearings dispersed around the outside of the road. The general road pattern suggests that drive-through buildings may be present, although none have been positively identified.

The unidentified area is southwest of the drive-through building area. Its salient feature is the road network, which forms a series of wide-radius 90-degree turns. This pattern suggests the presence of drive-through and other types of buildings.

The function of this installation may be one of initial missile assembly and checkout, and it probably has a recycling capability, with both functions being on a regional basis. That is, the installation may service the launch areas in the Gomel', Ovruch, Uman', and Stanislav/Kamenets-Podol'skiy areas.

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TABULATION OF DATA ON CONFIRMED, PROBABLE, AND POSSIBLE IRBM/MRBM LAUNCH AREAS, EUROPEAN USSR					
Location		Type	Construction Status	Figure- Item	
Distance and Direction from Reference City	Coords				
<u>Chernyakhovsk</u>					
22 miles NNW	54-58-30N 21-28-50E	Inline	Completed	2-1	
24 miles NNW	54-58-30N 21-36-30E	Inline	Completed	2-2	
9 miles NE	54-43-30N 22-04-50E	Inline	Completed or in late stage	2-3	
9 miles NE*	54-41-00N 22-04-50E	Probable Inline	Probably U/C	2-4	
22 miles WSW	54-32-50N 21-12-00E	Inline	Poss. mid-stage	2-5	
21 miles WSW*	54-35-40N 21-12-00E	Probable Inline	Undetermined	2-6	
29 miles NE**	55-00-50N 22-21-30E		Undetermined	2-7	
25 miles WNW**	54-45-05N 21-09-00E		Completed	2-8	
<u>Kamenets-Podol'skiy</u>					
20.5 miles NW	48-51-30N 26-08-30E	Dumbbell	Completed	9-1	
24 miles NW	48-53-00N 26-03-30E	Dumbbell	Completed	9-2	
12 miles NE	48-51-10N 26-43-00E	Inline	U/C	9-3	
<u>Stanislav</u>					
18 miles S	48-38-45N 24-43-30E	Dumbbell	U/C	9-4	
16 miles S	48-40-00N 24-48-30E	Dumbbell	Completed	9-5	
26 miles NW*	49-06-00N 24-08-00E	Probable mod- ified dumbbell	Completed	9-6	
27 miles NW*	49-04-00N 24-04-30E	Probable mod- ified dumbbell	Completed	9-7	
<u>Ovruch</u>					
33 miles WSW	51-08-50N 28-00-30E	Rectangular	Completed	17-1	
30 miles WSW	51-10-00N 28-03-00E	Rectangular	Completed	17-2	
20 miles W	51-16-50N 28-15-00E	Rectangular	Completed	17-3	
29 miles NE	51-43-55N 29-12-30E	Rectangular	U/C	17-4	
27 miles NE	51-42-00N 29-12-50E	Rectangular	Completed or in late stage	17-5	
34 miles SSW	50-52-10N 28-18-30E	Inline	Completed or in late stage	17-6	
<u>Gomel'</u>					
10 miles W	52-24-45N 30-39-45E	Inline	U/C	23-1	
10 miles SW	52-18-45N 30-42-15E	Inline	U/C	23-2	
<u>Uman'</u>					
13.5 miles NE	48-53-40N 30-27-45E	Dumbbell	U/C	25-1	
49 miles SE	48-02-30N 29-33-30E	Inline	Completed	25-2	
* Probable launch area					
** Possible launch area					

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CONCLUSIONS

1. Three definite patterns for deployed, fixed IRBM/MRBM launch areas have been identified in the European USSR. These are referred to as the Rectangular, Dumbbell, and Inline type launch areas.

2. [REDACTED]

Five launch areas of this type with a total of 20 launch pads have been identified. Based on the similarity of facilities, size, and general layout, a correlation can be made between the Rectangular launch areas and those of the Dumbbell pattern. Five launch areas of the Dumbbell type with a total of 20 launch pads have been identified.

3. There is no firm tie-in of the Inline-type launch areas with Kapustin Yar, but the configuration of, and the facilities present at, this type of area indicates that they are IRBM/MRBM launch areas. Nine launch areas of this type with a total of 36 launch pads have been identified.

4. Some of the deployed operational support areas are similar to the Missile-Handling and Storage Area at Launch Complex G, Kapustin Yar.

5. There is no photographic evidence to indicate that these launch areas are intended to have an ICBM capability.

6. A total of 19 confirmed launch areas with 76 launch pads, 4 probable launch areas with 16 pads, and 2 possible launch areas with 12 pads have been identified.

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REFERENCES

PHOTOGRAPHY 25X1D

Mission	Date	Pass	Frames	Classification
[REDACTED]				

MAPS AND CHARTS

ACIC. WACs 167, 168, 232, and 233 (U)

ACIC. ONC E-3, 2d ed, scale 1:1,000,000 (U)

AMS. Series N501, Sheet NM 35-3, 4th ed; Sheet NM 35-12, 2d ed; Sheet NM 35-6, 4th ed; Sheet NM 35-7, 4th ed; Sheet NM 35-10, 4th ed; and Sheet NM 35-11, 4th ed; scale 1:250,000 (U)

SAC. US Air Target Charts, Series 200, Sheet 169-10A, 1st ed, Feb 58; and Sheet 168-6A, 1st ed, Jul 57; scale 1:200,000 (S)

DOCUMENTS

25X6

25X6 1. CIA. PIC/JB-1010/60, Missile Test Center, Kapustin Yar/Vladimirovka, USSR, 1 Dec 60 (S/Noform [REDACTED])
[REDACTED] -- Downgrading Prohibited)

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2. [REDACTED]

3. CIA. RR ER 61-4, Feb 61 (S)

4. CIA. PIC/JR-1006/61, Launch Complex "G", Surface-to-Surface Missile Facilities, Kapustin Yar/Vladimirovka Missile Test Center, Mar 61 (S/Noform [REDACTED])
-- Downgrading Prohibited)

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